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NOTICE OF ALLOWANCE AND FEE(S) DUE

03/31/2011 Davidson, Davidson & Kappel, LLC 485 7th Avenue 14th Floor New York, NY 10018

EXAMINER ELLIS, RYAN H ART UNIT PAPER NUMBER 3745

DATE MAILED: 03/31/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,868	05/24/2007	Joachim Bamberg	5038.1037	1419

TITLE OF INVENTION: GAS TURBINE VANE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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Davidson, Dav 485 7th Avenue 14th Floor New York, NY	7590 03/31 idson & Kappel, I		I be	Cert	ificate of Mailing or Trans s Fee(s) Transmittal is being tith sufficient postage for fire Stop ISSUE FEE address O (571) 273-2885, on the day	denocited with the United
110,11011,111	10010					(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,868	05/24/2007	•	Joachim Bamberg	•	5038.1037	1419
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2011
EXAM	INER	ART UNIT	CLASS-SUBCLASS	1		
ELLIS, F	RYAN H	3745	416-22300A	_		
FR 1.363). Change of corresp Address form PTO/SF "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. ASSIGNEE NAME A PLEASE NOTE: Unl	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON Taified below, no assignee	(1) the names of up to or agents OR, alternatic (2) the name of a sing registered attorney or 2 registered patent attorney or 10 registered patent or 10 registere	vely, le firm (having as a agent) and the name orneys or agents. If n printed. pe) oatent. If an assigne assignment.	member a 2s of up to loo name is 3	ocument has been filed for
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a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			 ab. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). 			
a. Applicant claim	tus (from status indicated s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no lor	ger claiming SMAL	L ENTITY status. See 37 C	FR 1.27(g)(2).
NOTE: The Issue Fee and the rest as shown by the rest.	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than Office.	the applicant; a regis	tered attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date		<u>.</u>
Typed or printed name						
This collection of inform n application. Confiden ubmitting the completed nis form and/or suggesti	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this bu	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the	on is required to obtain or 1.14. This collection is es depending upon the indi- e Chief Information Offic	retain a benefit by th timated to take 12 m vidual case. Any cor er, U.S. Patent and T	ne public which is to file (and inutes to complete, includir nments on the amount of tir rademark Office, U.S. Dep	by the USPTO to process) by gathering, preparing, and me you require to complete artment of Commerce, P.O.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/590,868	05/24/2007	Joachim Bamberg	5038.1037	1419
23280 75	90 03/31/2011	EXAMINER		
Davidson, Davidson & Kappel, LLC			ELLIS, RYAN H	
485 7th Avenue				
14th Floor			ART UNIT	PAPER NUMBER
New York, NY 100	018		3745	
			DATE MAILED: 03/31/201	1

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 838 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 838 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)
	10/590,868	BAMBERG ET AL.
Notice of Allowability	Examiner	Art Unit
	RYAN H. ELLIS	3745
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	vith the correspondence address in this application. If not included nunication will be mailed in due course. THIS
1. This communication is responsive to <u>1/18/2011</u> .		
2. The allowed claim(s) is/are 8-17.		
 3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been received in Applicat	ion No
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.	
INFORMAL PATENT APPLICATION (PTO-152) which giv		
5. CORRECTED DRAWINGS (as "replacement sheets") must		
(a) including changes required by the Notice of Draftspers		ew (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) including changes required by the attached Examiner Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview : Paper No 7. ☑ Examiner'	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowance

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Response to Arguments

1. Applicant's arguments, see page 4, filed 1/18/2011, with respect to the 112 first paragraph have been fully considered and are persuasive. The 112 first paragraph rejections of claims 8 to 14 have been withdrawn.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Willaim Gehris on 3-24-2011.

The application has been amended as follows:

In claim 17, line 5 "vane foot" has been changed to –vane tip--.

The above change was made to correct a typographical error.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance: the instant invention is deemed to be an unobvious improvement over the prior art of US Patent No. 6,488,238 to Battisti, US Patent No. 6,729,846 to Wobben, US Patent No. 4,930,729 to Savill, US Patent No. 5,069,403 to Marentic et al. and US Patent No. 6,666,646 to Van Ierland et al.. The improvement comprises having a micro profiled

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area on a turbine blade in a deceleration zone and having a non profiled area in a flow acceleration zone. Battisti teaches a blade with micro profiling but shows the profiling over the whole blade and therefore does not meet the limitation of having a non profiled area in an acceleration zone. Wobben teaches a shark like coating but fails to teach a non profiled area of the blade. Savill discloses a drag reducing coating but fails to teach having a blade with the coating in the correct areas. Marentic et al. teaches a drag reducing structure that could be used on a blade but fails to teach the specific areas that are and are profiled. Van Ierland et al. teaches a drag reducing coating for turbine blades but fails to teach the coating on the claimed areas on the blade.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN H. ELLIS whose telephone number is (571)270-7414. The examiner can normally be reached on Monday-Friday; 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ED LOOK can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RYAN H. ELLIS/ Examiner, Art Unit 3745

/Edward K. Look/ Supervisory Patent Examiner, Art Unit 3745